

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A system for ~~providing~~ provisioning packet based communication channels and multiple time-division multiplexed (TDM) communication channels over a shared X-DSL communication medium on a subscriber line, and the system comprising:

- a pair of X-DSL modems configured to couple to one another via the a subscriber line;
- a first modem with an input and an output and the first and second modem communicating with one another across the shared communication medium with at least the first modem of the pair of X-DSL modems including:
  - input buffers configured to ~~accepting a plurality of~~ accept input of both the TDM communications channels at an input thereof together with the packet based communications channels;
  - a payload framer coupled to the first modem input buffers for accepting the plurality of ~~and the~~ payload framer loading corresponding portions of TDM communications channels as an input and for placing data associated with each of the channels in a payload portion of the into each X-DSL frame, together with corresponding portions of the packet based communications channels into a remaining portion of each X-DSL frame; and
- a second of the pair of X-DSL modems including:
  - a payload deframer coupled with the second modem to demultiplex the ~~payload data~~ for deframing both the TDM communications channels together with the corresponding portions of the packet based

communications channels in each X-DSL frame from the first of the pair of modems.

2. (New) The system of Claim 1, wherein the payload framer further embeds each X-DSL frame with a parameter for synchronizing the TDM communication channels processed by the pair of the modems.

3. (New) An X-DSL modem for provisioning packet based communication channels and time-division multiplexed (TDM) communication channels on a subscriber line, and the X-DSL modem comprising:

- input buffers configured to accept input of both the TDM communications channels together with the packet based communications channels;
- a payload framer coupled to the input buffers and the payload framer loading corresponding portions of TDM communications channels into each X-DSL frame, together with corresponding portions of the packet based communications channels into a remaining portion of each X-DSL frame.

4. (New) The X-DSL modem of Claim 3, wherein the payload framer further embeds each X-DSL frame with a parameter for synchronizing the TDM channels.

5. (New) A method for provisioning packet based communication channels and time-division multiplexed (TDM) communication channels on an X-DSL modulated subscriber line, and the method comprising:

- accepting input of both the TDM communications channels together with the packet based communications channels;

- loading corresponding portions of the TDM communications channels into each X-DSL frame;
- determining a space availability in each X-DSL frame; and
- adding selected packet based communications to each X-DSL frame loaded in the loading act, subject to the space availability determination in the determining act.

6. (New) The method of Claim 5, further comprising:

- embedding each X-DSL frame with a parameter for synchronizing the TDM communication channels.